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Juha H. Salo

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EXAMINER

SAINT CYR, JEAN D

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/698,600	Applicant(s) SALO ET AL.	
	Examiner JEAN D. SAINT CYR	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,35-48 and 50-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-18,35-48 and 50-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This action is in response to applicant's amendment filed on 06/18/2008. Claims 1-18, 20-33, 35-48, 50-59 are still pending in the current application. Claims 19, 34, 49 were cancelled.

This action is made FINAL.

Response to Arguments

Applicant's arguments were fully considered, but they were not persuasive. Applicant argues that Watson et al did not disclose that a transmitted movie is accessed from the memory of the set-top box in no sooner than a scheduled broadcast time of that movie. Also, applicant tries to change set-top box by terminal and terminal by apparatus just to make the claims different from the cited references.

However, Watson et al disclose the actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092; that means the users can only access the preload content according to the schedule of the digital asset manager; a movie may arrive and be stored in the set-top box, however it may have a start date associated with it which does not allow it to be viewed until a later date, 0182; that means the users will be able to view the movie according to the schedule of the headend. Also, replacing words like set-top box, terminal by apparatus did not really change the functionality of the claims. That information proves that the set top box is operated according to the schedule of the digital asset manager. As a result, this action is made final.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the

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treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-8, 10, 14- 18, 20, 22-23, 25, 29, 30-33,35, 37-38, 40, 44,45-48, 50, 52,53, 55, 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Watson et al, US No. 20040133923.

Re claim 1, Watson et al disclose a content source(the content delivery system is responsible for delivering data to set top boxes, 0044) comprising a continuity server configured to maintain at least one piece of content(see fig.1, digital asset management) and a schedule(The distribution database contains content and component broadcast schedules, datacast distribution logs and set top box pre-load information, 0051), wherein the schedule specifies at least one scheduled time for broadcast of the at least one piece of content by the content source(scheduling information such as dates or times when to make a movie available for viewing, and how long it should remain available, 0052), and wherein the content source is configured to broadcast the at least one piece of content in accordance with the schedule(the same movie may be broadcast to the set-top box several times, 0088); and

a terminal(see fig.1f, set top box) of configured to store, in a memory(The set-top box has a processor which is capable of receiving the data stream from the broadcast signal, reassembling data, and writing data to the hard drive, 0011), at least one piece of pre-broadcast content comprising the same at least one piece of content maintained by the continuity server, wherein the terminal is configured to access at least one piece of pre- broadcast content from the memory in no sooner than the scheduled time for broadcast of the same at least one piece of content(the actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager,

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0092; that means the users can only access the preload content according to the schedule of the headend), and thereafter present the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source(A movie may arrive and be stored in the set-top box, however it may have a start date associated with it which does not allow it to be viewed until a later date,0182; that means the users will be able to view the movie according to the schedule of the headend).

Re claim 2, Watson et al disclose a system according to Claim 1, wherein the terminal is configured to synchronize the accessed at least one piece of pre- broadcast content with the same at least one piece of content broadcast by the content source before presenting the accessed at least one piece of pre-broadcast content, and wherein the terminal is configured to present the synchronized at least one piece of pre-broadcast content(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, that means there is synchronization in the schedule where stored schedule in the set-top box needs to match the schedule at the digital asset manager,0092).

Re claim 3, Watson et al disclose wherein the terminal is storing configured to store (see fig.1f, mass storage; the method involves transmitting movies to a set-top box and allowing movies to accumulate. A hard disk drive in the set-top box is used to store movies, 0008) the at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content (a movie may arrive and be stored in the set-top box, however it may have a start date associated with it which does not allow it to be viewed until a later date, 0182).

Re claim 4, Watson et al disclose wherein the content source(content provider , 0014; see fig.1e, content delivery system) is configured to send, to the terminal(the method involves transmitting movies to a set-top box; The content delivery system is responsible for delivering data to set top boxes, 0044), the at least one piece of content

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maintained by the continuity server, and wherein the terminal is configured to receive and store the received (see fig.1f, mass storage; the method involves transmitting movies to a set-top box and allowing movies to accumulate. A hard disk drive in the set-top box is used to store movies, 0008) at least one piece of content as the at least one piece of pre-broadcast content (the audio and video portions of the movie are transmitted in separate files, 0064).

Re claim 5, Watson et al disclose wherein the content source is capable of configured to at least one of encode or transcode the at least one piece of content (Movies distributed to subscribers are encrypted, 0041) and the schedule before sending the at least one piece of content and the schedule to the terminal (For each movie, its content, metadata, promotional and other material is collected as a single movie product, or "movie data" that is managed and scheduled for distribution. The content preparation and encoding system is also responsible for preparing data to be broadcast. Once data has been prepared and properly encoded, it is sent back to the asset management system for storage, 0041; that means everything was encoded, including the schedule) and wherein when the content source encodes the at least one piece of content, the terminal is configured to receive the encoded at least one piece of content, and thereafter decode the encoded at least one piece of content (see fig.1f, MPEG Stream decoding and MPEG Video Decoder, 0161).

Re claim 7, Watson et al disclose wherein the terminal is configured to release each piece of pre-broadcast content when a current time of the terminal matches the scheduled time for broadcast of the same piece of content by the content source, and wherein the terminal is capable configured to access at least one released piece of pre-broadcast content (movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092; that means viewing content depends on the schedule of the digital asset manager).

Re claim 8, Watson et al disclose wherein the content source is configured to

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broadcast the at least one piece of content when a current time of the content source matches the at least one scheduled and wherein the terminal is also configured to synchronize the current time of the terminal with the current time of the content source((A movie may arrive and be stored in the set-top box, however it may have a start date associated with it which does not allow it to be viewed until a later date, 0182, that means the broadcast time of the source and the terminal needs to be matched in order to view a content).

Re claim 10, Watson et al disclose wherein the terminal is also configured to expire each released piece of pre-broadcast content when the current time is subsequent to the scheduled time, and wherein the terminal is configured to delete, from the memory, at least one expired piece of pre- broadcast content (the content provider may specify an end date associated with a movie, after which date the movie can no longer be viewed, and is automatically deleted from the set-top box, 0182).

Re claim 14, Watson et al disclose wherein the schedule includes at least one slot specifying a broadcast scheduled time and a piece of pre-broadcast content(pre-loaded, 0182), wherein the terminal is configured to receive at least one slot of the schedule, and wherein the terminal is configured to access at least one piece of pre-broadcast content in accordance with the at least one slot received by the terminal(a movie may have an associated start and end date or time,0014; that means terminal can only access the content according to time associated with it).

Re claim 15, Watson et al disclose a controller of accessing configured to access at least one piece of pre-broadcast content from the-content storage of a local memory no sooner than a scheduled time for broadcast of the same at least one piece of content by a content source, the scheduled time being specified by a schedule (there may be two processors in the set top box. For example, one is a host processor, and the other is a microcontroller. The host processor executes software that initiates reception and demodulation of the appropriate ATSC/dNTSC signals, stores files, including movie

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data, on the hard drive, provides a graphical user interface, performs decryption of movie content and other conditional access functions, initiates and controls playback of movie content, with interactive features, and communicates with the SMS for rental agreement and logging. The microcontroller is used to interface with the front panel and remote control, 0121), and thereafter presenting configured to present the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source (The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092).

Re claim 16, Watson et al disclose wherein the controller(microcontroller, 0121)is also configured to synchronize the accessed at least one piece of pre-broadcast content (pre-loaded, 0182) with the same at least one piece of content broadcast by the content source, and wherein the controller is configured to present the synchronized at least one piece of pre-broadcast content(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, that means there is synchronization in the schedule where stored schedule in the set-top box needs to match the schedule at the digital asset manager,0092).

Re claim 17, Watson et al disclose wherein the content storage(see fig.1f, mass storage) from which the controller is configured to access at least one piece of pre-broadcast content is configured to store the at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content(The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092; that means the controller can access the content in the HDD according to the schedule of the asset manager).

Re claim 18, Watson et al disclose wherein the apparatus(see fig.1f, set-top box) is configured to receive at least one piece of content maintained by a continuity server of a content source(the method involves transmitting movies to a set-top box; The content

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delivery system is responsible for delivering data to set top boxes, 0044), and wherein the content storage from which the controller is configured to access at least one piece of pre-broadcast content is configured to store the received at least one piece of content as the at least one piece of pre-broadcast content(see fig.1f, mass storage; the method involves transmitting movies to a set-top box and allowing movies to accumulate. A hard disk drive in the set-top box is used to store movies, 0008).

Re claim 20, Watson et al disclose wherein the apparatus(see fig.1f, set-top box) is configured to receive at least one piece of content at least one of encoded or transcoded at the content source(see fig.1, content preparation & encoding; Movies are transmitted to the set-top box using a new datacasting technology which allows data to be encoded onto standard television signals and transmitted using existing television transmitters and broadcast towers, 0012) , and wherein when the content source encodes the at least one piece of content, the receiver apparatus is configured to receive the encoded at least one piece of content, and thereafter decode the encoded at least one piece of content(see fig.1f, PES Decryption/De-scramble; the set top box allows for the movie to be decrypted and played, 0015).

Re claim 22, Watson et al disclose wherein the controller(microcontroller, 0121) is also configured to release each piece of pre-broadcast content(The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092) when a current time of the terminal apparatus matches the scheduled time for broadcast of the same piece of content by the content source(The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092),and wherein the -controller is configured to access at least one released piece of pre-broadcast content(provides viewers access to a library of movies, or any other audio/video content available for viewing at anytime, 0008).

Re claim 23, Watson et al disclose wherein the content source broadcasts the same at least one piece of content when a current time of the content source matches

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the at least one scheduled time, and wherein the controller is further configured to synchronize the current time of the with the current time of the content source(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, that means there is synchronization in the schedule where stored schedule in the set-top box needs to match the schedule at the digital asset manager,0092).

Re claims 25, 29, 30, 31, 32, 33, 35, 37, see rejection on claims 10, 14, 15, 16, 17, 18, 20, 22 respectively.

Re claims 38, 40, 44, 45, 46, 47, 48, see rejection on claims 23, 10, 14,15,16,17, 18.

Re claim 50, see rejection on claim 20.

Re claim 52, see rejection on claim 22.

Re claim 53, see rejection on claim 23.

Re claim 55, see rejection on claim 10.

Re claim 59, see rejection on claim 14.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 6, 12, 13, 21, 27, 28, 36, 42-43, 51, 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Traw et al, US No. 20030066090.

Re claim 6, Watson et al did not explicitly disclose wherein the schedule maintained by the continuity server also specifies at least one scheduled time the broadcasts for broadcast of at least one piece of live broadcast content by the content source, wherein the terminal is configured to receive at least one piece of live broadcast content when a current time matches the broadcast scheduled time for broadcast of the respective at least one piece of live broadcast content, wherein the terminal is configured to access at least one of at least one piece of pre-broadcast content stored by the terminal and at least one piece of live broadcast content received by terminal, and wherein the terminal is configured to present at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content.

However, Traw et al disclose wherein the schedule maintained by the continuity server(schedule of a server , 0026) also specifies at least one scheduled time the broadcasts(time specified in the data file broadcast schedule, 0047) for broadcast of at least one piece of live broadcast content(live and captured content, 0099) by the content source, wherein the terminal is configured to receive at least one piece of live broadcast content when a current time matches the broadcast scheduled time for broadcast of the respective at least one piece of live broadcast content, wherein the terminal is -configured to access at least one of at least one piece of pre-broadcast content stored by the terminal and at least one piece of live broadcast content received by terminal, and wherein the terminal is configured to present at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content(a currently broadcasting data file or a data file stored in a cache memory of the client. Thus, the client 201 can stream data files, e.g. television and movies, tailored to the individual's tastes from live and captured content on a

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personalized channel 214 to the display device 219, with no user interaction required, except to pick the personalized channel, 0057; that means users can present live broadcast and preload broadcast by only tuning to the channel without any interaction).

It would have been obvious for any person of ordinary skill in the art to combine the invention of Watson with the invention of Traw for the purpose of allowing users to get access to live broadcast.

Re claim 12, Watson et al did not explicitly disclose wherein the terminal is also storing configured to store a schedule comprising the same schedule maintained by the continuity server.

However, Traw et al disclose wherein the terminal is also storing configured to store a schedule(see fig.2, element 211, storage) comprising the same schedule maintained by the continuity server(the client receives the broadcast of data file broadcast schedule from the server,0047).

In view of the teaching of Traw, it would have been obvious for any person of ordinary skill in the art at that time the invention was made to implement wherein the terminal is also capable of storing a schedule comprising the same schedule maintained by the continuity server into the system of Watson. With such extra, user will be able to check all incoming events.

Re claim 13, Watson et al disclose wherein the schedule includes at least one slot(main menu of the user interface includes a window, 0017; that means slot) specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time(the window which frames the video may preferably be highlighted, and selected, 0017), wherein the terminal is of receiving configured to receive a selection of at least one piece of pre-broadcast content for the at least one slot, and thereafter modifying the schedule to specify the selected at least one piece of pre- broadcast content in the at least one slot(once selected, the window expands to full screen view.

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Pressing any key on the remote control or front panel, with the exception of the "Play" controls, will minimize Screen once again and return the user to the Main Menu, 0017).

Re claim 21, see rejection on claim 6.

Re claim 27, see rejection on claim 12.

Re claim 28, see rejection on claim 13.

Re claim 36, see rejection on claim 21.

Re claim 42, see rejection on claim 12.

Re claim 43, see rejection on claim 13.

Re claim 51, see rejection on claim 21.

Re claim 57, see rejection on claim 12.

Re claim 58, see rejection on claim 13.

Claims 9,11, 24, 26, 39, 41, 54, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Connelly et al, US No. 7020893.

Re claim 9, Watson et al disclose wherein the terminal is also configured to expire each released piece of pre-broadcast content when the current time is subsequent to the scheduled time (Movie Expirations, 0304; the movies are pushed down by the provider to reside passively in the box for a finite time period, 0012), and wherein the terminal is configured to maintain, in the memory, at least one expired piece of pre-broadcast content.

But did not explicitly disclose wherein the terminal is configured to maintain, in the memory, at least one expired piece of pre- broadcast content.

However, Connelly et al disclose if a user has not watched a particular piece of content, the storage space occupied by that piece of content is generally considered not to be available for storage of another piece of content, col.14, lines 56-59; that means expired contents can stay in the hard drive if not watched yet.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to implement wherein the terminal is capable of maintaining, in the memory, at least one expired piece of pre-broadcast content into the system of Watson. This option will give opportunity to users to maintain some expired piece of content in the memory.

Re claim 11, Watson et al did not explicitly disclose wherein the terminal is configured to maintain at least one expired piece of pre-broadcast content in the memory of the terminal, and wherein the terminal is -of overwriting configured to over write at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content(if a movie has already been watched by the user, the next treatment indicator would indicate "REPLACE" to indicate that the storage space occupied by that particular movie is available for storage of another movie, Col.15, lines 41-45).

However, Connelly et al disclose wherein the terminal is configured to maintain at least one expired piece of pre-broadcast content in the memory of the terminal, and wherein the terminal is configured to over write at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content.

In view of the teaching of Connelly, it would have been obvious for any person of ordinary skill in the art at that time the invention was made to implement wherein the terminal is capable of maintaining at least one expired piece of pre-broadcast content in the memory of the terminal, and wherein the terminal is capable of overwriting at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content into the system of Watson. This option will give opportunity to users to maintain some expired piece of content in the memory and replace expired content by new content.

Re claim 24, see rejection on claim 9.

Re claim 26, see rejection on claim 11.

Re claim 39, see rejection on claim 9.

Re claim 41, see rejection on claim 11.

Re claim 54, see rejection on claim 9.

Re claim 56, see rejection on claim 11.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcy whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an

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application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199(IN USA OR CANADA) or 571-272-1000.

/Annan Q Shang/

Primary Examiner, Art Unit 2623

Jean Duclos Saintcyr